

## Appendix D. Description of SIPP Panel File and Data Quality

### DESCRIPTION OF SIPP 1985 PANEL FILE

The estimates presented in this report are based on the second SIPP panel file. This file contains monthly data for persons over a 32-month period (28-month period for the first rotation group). The staggered SIPP design (described in Appendix A) means that the actual reference periods are January 1985 to April 1987, October 1984 to May 1987, November 1984 to June 1987, and December 1984 to July 1987. The period covered by the 1985 longitudinal panel file consists of 32 interview months (eight interviews) for rotations 2, 3, and 4. Rotation 1 has only 28 interview months (seven interviews). Data from all four rotation groups are available only for the reference period January 1985 through April 1987.

Each person in the panel file has been assigned three weights: a weight for calendar year 1985, a weight

for calendar year 1986, and a weight for the 28- or 32-month reference period. In order to receive a non-zero weight, a person must have an observation for each month of the relevant reference period (in this report, 1985 and 1986) or have a complete set of observations up until the time he or she died or became institutionalized. The data shown in this report are affected if characteristics of persons with an incomplete set of observations differed from those with a complete set.

Table D-1 shows three categories of sample persons by sex, age, and program participation status. The numbers in the table are unit counts; they are not weighted. The category "complete set of interviews obtained" includes 23,093 persons, but 651 of these persons died or were institutionalized during the 32-month period. The next category, "Interviewed in first

Table D-1. Percent Distribution: Three Categories of Sample Persons

Characteristic	Complete set of interviews obtained <sup>1</sup>	Interviewed in first wave, left sample for reasons other than death or institutionalization	Not a member of sample household during first wave, interview obtained in second or later waves
Total.....	23,093 (100.0)	13,620 (100.0)	6,277 (100.0)
Sex:			
Male.....	47.5	48.4	50.4
Female.....	52.5	51.6	49.6
Age at first interview:			
Under 18 years.....	28.4	27.2	35.0
Under 6 years.....	10.1	9.1	21.7
18 to 24 years.....	10.2	14.2	24.4
25 to 44 years.....	29.6	30.3	26.5
45 to 64 years.....	19.6	19.0	11.1
65 years and over.....	12.2	9.4	3.1
75 years and over.....	4.6	3.6	1.1
Program participation, first month in sample:			
Persons 18 years and over.....	16,530 (100.0)	9,909 (100.0)	4,082 (100.0)
Participated in major assistance program.....	8.8	9.0	9.7
AFDC or general assistance.....	2.1	2.7	3.1
Food stamps.....	4.7	4.8	4.7
Medicaid.....	5.0	4.8	5.3
Public/subsidized housing.....	3.0	3.1	2.4
SSI.....	2.2	1.5	1.6
Did not participate.....	91.2	91.0	90.3
Covered by private health insurance.....	78.4	74.1	66.7
Provided through employer.....	42.8	40.1	39.7
Not covered by private health insurance.....	21.6	25.9	33.3

<sup>1</sup>Includes 651 persons who died or were institutionalized during the 32-month period.

wave, left sample for reasons other than death or institutionalization" includes 13,620 persons. The final category includes 6,277 persons who were not a member of a SIPP household during the first wave of interviews, but who subsequently became a member of a sample household.

A comparison of the first two columns shows that the characteristics of those who completed the full set of interviews are reasonably close to the characteristics of those who dropped out or were removed from the sample. The major differences in the age distribution are for young adults and the elderly. Young adults are underrepresented and the elderly are overrepresented in the group of persons who completed the full set of interviews. The data in table D-1 are, as noted, unweighted, and any potential problem caused by unrepresentative age distributions are minimized when the file is weighted to independent controls.

### TIME-IN-SAMPLE BIAS

The use of the panel file to obtain estimates for 1985 and 1986 raises the issue of time-in-sample bias. There is ample evidence that certain measures vary according to the number of times the respondent has been visited. In CPS, for example, the measured unemployment rate is always higher for the group of households being interviewed for the first time than for the groups being interviewed for the second or later times.

Time-in-sample bias arises when a person's response to a survey question (or the interviewer's method of asking a question) is influenced by what occurred in a previous visit. The overlapping SIPP sample design provides the data that allows for an examination of the presence of time-in-sample bias in SIPP estimates. That is, it is possible in SIPP to obtain estimates for a given time period from two or more separate panels and the amount of time respondents will have spent in the SIPP panel will differ for each of the panels. For example, estimates for each of the four quarters of 1986 can be

obtained from both the 1985 and 1986 panels (respondents in the 1985 panel will have had more visits), and estimates for the first quarter of 1987 can be obtained from the 1985 panel, the 1986 panel, and the 1987 panel.

The data in table D-2 show estimates of the number of persons without health insurance coverage for the four quarters of 1986, 1987, and 1988. The estimates, combined across panels in the report, are shown here separately for each panel.

The figures in table D-2 provide no evidence that substantiates the existence of time-in-sample bias. All of the observed differences across panels are smaller than the differences that could be explained by sampling error.

**Table D-2. Persons Without Health Insurance Coverage: Estimates of Monthly Averages for Calendar Quarters from 1985, 1986, and 1987 Panels**

(Numbers in thousands)

Year and quarter	Panel		
	1985	1986	1987
1986:			
Quarter 1 .....	33,971	34,333	(X)
Quarter 2 .....	33,894	34,144	(X)
Quarter 3 .....	33,794	34,419	(X)
Quarter 4 .....	33,778	33,156	(X)
1987:			
Quarter 1 .....	33,433	32,357	33,374
Quarter 2 .....	(X)	32,117	32,715
Quarter 3 .....	(X)	32,240	32,782
Quarter 4 .....	(X)	32,144	31,475
1988:			
Quarter 1 .....	(X)	(X)	30,795
Quarter 2 .....	(X)	(X)	30,824
Quarter 3 .....	(X)	(X)	30,742
Quarter 4 .....	(X)	(X)	31,507

X Not applicable.